TH/bs 021237WO
22. June 2005

CLAIMS

1. Coupling for spiral wire flexible hoses having a ring clamp conformed as a clamping jaw and including at least two partial shells enclosing the sleeve, which ring clamp has an inner contour that hose in positive locking engagement a spiral wire flexible hose that is placed over a spout,
characterized in that a spiral (15) is provided that encircles the spiral wire flexible hose (9) several times in the area of the spout (8) up to a protrusion (1c) at the end of the ring clamp (1) and is clamped so as to be immovable axially by the ring clamp (1).

2. The coupling according to claim 1,
characterized by a clamping lever (3) that is attached to the free circumferential end of one of the partial shells (1b) via a bolt (4), and may be connected via a recoil spring (6) to the other free circumferential end (7) of the corresponding partial shell (1a) to create non-positive locking engagement between the steel wound sleeve (9) and the ring clamp (1).

3. The coupling according to claim 1 or 2,
characterized in that the ring clamp (1) is injection moulded from plastic.

4. The coupling according to claim 3,

characterized in that the ring clamp (1) is constructed from two partial shells (1a, 1b).

5. The coupling according to claim 3, characterized in that the ring clamp is designed as a single part.

6. The coupling according to any of claims 1 to 5, characterized in that the spiral (15) is made from plastic.

7. The coupling according to claim 6, characterized in that an electrically conductive plastic is used as the plastic.

8. The coupling according to any of claims 1 to 7, characterized in that the spiral (15) is designed as an endless spiral that can be shortened.

9. The coupling according to any of claims 1 to 8, characterized in that the spiral (15) has an essentially rectangular cross-section.

10. The coupling according to any of claims 6 to 8, characterized in that the spiral (15) is furnished on its inside with a centrally located ridge-like protrusion (17).

11. The coupling according to any of claims 1 to 10, characterized in that the inner contour of the partial shells (1a, 1b) has concentric ridges (16).

12. The coupling according to any of claims 1 to 10,

characterized in that the inner contour of the partial shells (1a, 1b) has ridges running in the manner of a thread.

13. The coupling according to any of claims 1 to 10, characterized in that the inner contour of the partial shells (1a, 1b) has a plurality of peg-like projections.

14. The coupling according to any of claims 11 to 13, characterized in that the ridges or projections have a triangular cross-section.

15. The coupling according to any of claims 1 to 14, characterized in that the spout (8) has a flange conformed as an annular flange (11) and that the partial shells (1a, 1b) have an annular groove (12) inside the clamping jaw (1) provided to accommodate the annular flange (11).

16. The coupling according to any of claims 1 to 15, characterized in that the spout (8) has an annular groove (13) in which a seal is inserted in the area over which the sleeve end is placed.

17. The coupling according to claim 16, characterized in that an O-ring cord (14) is used as a seal.

18. The coupling according to claims 2 to 17, characterized in that the clamping lever (3) is made from stainless steel.

19. The coupling according to claims 2 to 18, characterized in that the recoil spring (6) is articulated on a pin (5) arranged parallel to bolt (4) and that the bolt (4), the pin (5) and/or the recoil spring are made from rustproof steel.